



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/782-0610

November 19, 2014

Tensen Dairy

Attn: Nick or Kathy Tensen

Exemption 6 and Exemption 7(C)

RECEIVED

NOV 20

Re: Tensen Dairy
NPDES No. ILA010107
Notice of Incompleteness

NPDES PROGRAM
EPA, REGION 5

Gentlemen:

This is the notification regarding the incompleteness of the application and supporting documents for the NPDES Permit, received on October 4, 2013 and February 5, 2014 for the above referenced facility. The application and the response to the Notice of Incompleteness dated January 30, 2014 has been reviewed and deemed incomplete for the purpose of review towards issuance of an NPDES permit. Please be advised that the Illinois Pollution Control Board adopted Subtitle E regulations for CAFOs in August 2014. The Comprehensive Nutrient Management Plan (CNMP) must be revised to meet the requirements of the new regulations. The comments below include issues to be addressed regarding the new regulations. The following specific information and documentation are required to be submitted within the designated time frame below in order to continue the review.

1. Section 2.2 of the CNMP states that the producer is interested in construction of a roof structure, a pumping plant, an onsite pipeline project, an offsite transfer pipe and pump, several waste transfer structures and a mortality composting facility. The submitted CNMP, i.e., storage volume, land application area, etc., is based on the proposed modification of and upgrading the existing facility. Please provide a detailed schedule for the mentioned construction and the status of any application for construction with the Illinois Department of Agriculture. Please provide a revised interim CNMP for the existing facility prior to the proposed construction to meet the Subtitle E regulations for permit issuance.
2. Per Form 2B of the application, Section 1.1 and the table of Section 6.1 of the CNMP indicate that the available land application area is about 440 acres. Four (4) Manure Spreading Easement agreements are provided with the application. The total field area under agreement is 281 acres. Pursuant to Section 502.510(b)(2) of Title 35 of Illinois Administrative Code (35 IAC 502.510(b)(2)), the application land shall be owned, leased/rented, or covered by a consent agreement to the CAFO owner or operator. Please provide the information that Tensen Dairy owns, rents or leases the 440 acres of application fields, or provide the consent agreement for the entire 440 acres of application fields as required by 35 IAC 502.510(b)(2).

3. Stormwater runoff volume from Sand Lane, Sand Separation & Stacking Areas in the Proposed Storage Volume Calculations (Section 2.2 of the CNMP) is determined from a surface catchment area of 17,952 square feet, which is about the sum of the areas of the existing dry manure/bedding stack, proposed waste transfer sand lane, and the proposed solid stacks at the north end of the sand lane. The Proposed Plot Plan (Section 2.2 of the CNMP) does not show any stormwater diversion devices around these areas. Please specify if and how the stormwater from the adjacent stacking areas is diverted. If not, all catchment areas that collected and direct stormwater runoff to the stacking areas should be included in the stormwater runoff volume calculation.

Please provide verification that stormwater not contaminated by livestock waste is diverted from the livestock handling facility. Also, revise the CNMP to indicate that there is no overflow discharge of livestock waste including contaminated stormwater runoff from the production area to the waters of the United States as required by 35 IAC 502.605(a).

4. The updated Section 6.3 included in the submittal of January 30, 2014 shows soil test P for all livestock application field is less than 300 lb./ac. Please submit the original laboratory reports of the soil test results for test year 2012 or 2013 as well.
5. The cropping schedules as required by 35 IAC 502.505(i) in Sections 6.5, 6.6 and 6.7 of the CNMP are not consistent. For example, the table of Section 6.5 Planned Crops and Fertilizer Recommendation shows field A's and B's are scheduled for triticale and corn silages as double-crop system. In Section 6.6 Manure Application Planning Calendar, corn silage is listed as primary crop for field A's and B's, while triticale is listed as target crop in Section 6.7 Planned Nutrient Applications. Please provide an explanation on how crops are scheduled for each field.
6. Section 6.5 of the NMP provided yield goals for crops scheduled for manure application fields. 35 IAC 502.505(j) and 502.625(e) require that recommended crop nutrient needs be determined based on realistic crop yield goals. Please provide the average yields over a five-year period from the land application fields as described by 35 IAC 502.625(e)(1), or an estimated realistic crop yield goal using methods specified by 35 IAC 502.625(e)(2). Please also adjust recommended nutrients (N, P₂O₅ and K₂O) in Section 6.5 if necessary.
7. The source of the nutrient values for liquid and solid manure used to determine the available N, P₂O₅ and K₂O in the table of Section 6.7 is unknown, i.e., 117 lbs./ac. of available N when 27,000 gallon/ac. liquid manure is applied or 102 lbs./ac. available N when 25.5 tons/ac. solid manure is applied. Section 6.4 Manure Nutrient Analysis provides reference nutrient values for solid and liquid manure, i.e., 6.0 lbs. available N/1,000 gallon for liquid manure and 2.0 lbs. available N/ton for solid manure. These values are not used in determining the application rate. The source of the nutrient values used in manure calculation must be provided in the CNMP.
8. Values under Nutrients Applied in the table of Section 6.8 do not match the values of the available nutrients in the table of Section 6.7. For example, Nutrient Applied to field A1 in 2013

in the table of Section 6.8 is 180 lbs./ac. of N, 84 lbs./ac. of P_2O_5 , and 299 lbs./ac. of K_2O . According to the table of Section 6.7, nutrient applied to Field A1 in 2013 should be 294 lbs./ac. of N, 218 lbs./ac. of P_2O_5 , and 326 lbs./ac. of K_2O . In addition, the source of the nutrient values used to calculate Avail. N, Avail. P_2O_5 and Avail. K_2O in Section 6.7 is unknown. Please clarify the inconsistency of values mentioned above and provide the information that is missing.

9. Note 2 of the table in Section 6.8 of the CNMP states that the values of Nutrient Applied are the nutrients expected to be available to the crops from that year's manure application, commercial fertilizer application and the nitrate from the irrigation water, which does not include mineralization of organic nitrogen. Note 3 indicates that Balance After Recs is Nutrients Applied minus Fertilizer Recs for nitrogen, which also includes the amount of residual nitrogen expected to become available that year from prior year's manure application. The results of nitrogen balance do not show any available nitrogen from mineralization of organic matter. Pursuant to 35 IAC 502.505(n)(5) and 502.625(d)(2), the available nitrogen should also include the first-year or prior year mineralization of organic nitrogen. Please adjust the nitrogen calculation and manure application rate accordingly.
10. Section 1.2 of the CNMP states that if manure application is necessary during the winter, only small amounts shall be applied that adequately address waste storage concerns until non-frozen land is available. As manure is surface applied, please provide a winter application plan that meets the requirements of 35 IAC 502.630 as required by 35 IAC 502.510(b)(12). The plan should address measures taken to acquire storage volume for winter season prior to December 1, comply with requirements for application land including slopes, setbacks and erosion controls, and meet weather restrictions for winter application.
11. The Field Location Map shows that application fields B-2, B-6, HR-2 and U-3 are within 200 feet of surface water. 35 IAC 502.615(6) requires that where surface waters are on the assessed field or within 200 feet of the field, livestock waste applied to the field shall be injected or incorporated within 24 hours after application or equivalent conservation practices be installed and maintained on the field pursuant to USDA-NRCS practice standards. Please adjust the land application plan accordingly.
12. Should temporary manure stacks, which are operated less than 6 month, be used at the facility, requirements of 35 IAC 501.404(b), i.e., 75 feet from any water well, cover and pad or other controls to prevent runoff and leachate from entering surface water and groundwater, must be met. Please revise the CNMP accordingly.
13. Pursuant to 35 IAC 502.620(c), livestock waste shall not be applied during precipitation when runoff of livestock waste will be produced. In addition, surface land application of livestock waste shall not occur within 24 hours preceding a forecast of 0.5 inches or more of precipitation in a 24-hour period as measured in liquid form. Provisions of 35 IAC 502.620(c) must be met and specified in the CMNP.

14. Section 1.2 provides specific odor control practices for the production area only. Please provide odor control practices during waste removal and field application so as to not affect neighboring residences as described by 35 IAC 501.405.
15. Recordkeeping is required by 35 IAC 502.320. This may include, but is not limited to, site-specific nutrient management plan, maximum number and type of animals, land application and its rate calculation, amount of nitrogen and phosphorus applied to each field from all sources, manure and soil sampling and testing results, dead animal management, storage facility design and management, weekly and daily inspection and deficiency correction procedures and results. Please specify the records that will be kept and maintained in accordance with 35 IAC 502.320 and 502.510(b)(16).

Please provide an updated CNMP addressing all above issues within 30 days of the date of this letter. Failure to submit a response that includes the requested information within the time period specified may cause the Permit Section to refer the facility to the compliance and enforcement programs, and could be cause for denial of your NPDES Permit. Include on all correspondence the above proposed NPDES permit number.

Upon receiving a written response including the requested information the Agency will continue review of the application. Should you have any questions or comments regarding the above, please contact Wei Han at (217) 782-0610 or at the above address.

Sincerely,



Wei Han
Environmental Protection Engineer
Permit Section
Division of Water Pollution Control

DLH:WH: P:CAFO\TensenFarm_NOI.docx

cc: DWPC/Champaign Regional Office
Frank and West, Inc.
Records
USEPA Region 5/Julianne Socha